

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

REVISED VERSION

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
6 January 2005 (06.01.2005)

PCT

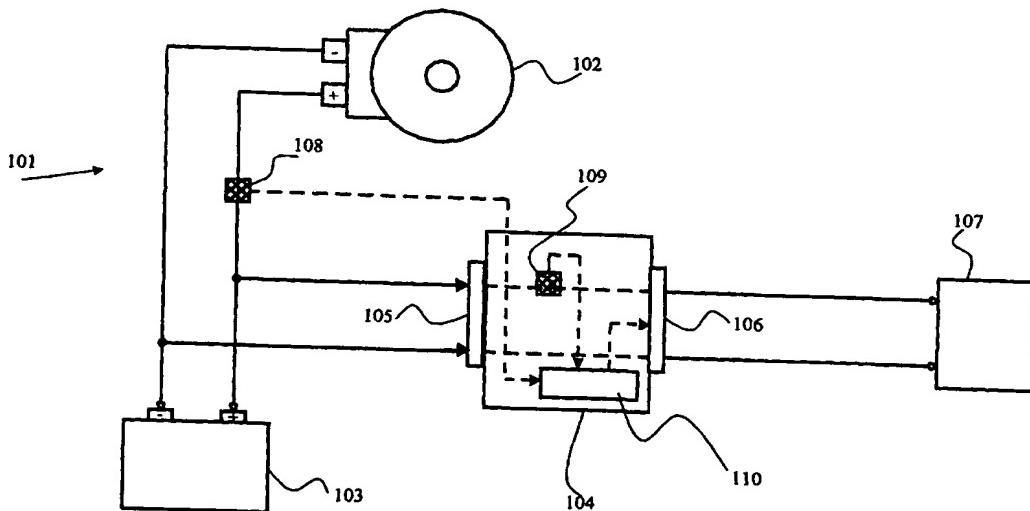
(10) International Publication Number  
**WO 2005/002040 A1**

- (51) International Patent Classification<sup>7</sup>: H02P 9/44, (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number: PCT/SE2004/001011
- (22) International Filing Date: 23 June 2004 (23.06.2004)
- (25) Filing Language: Swedish
- (26) Publication Language: English
- (30) Priority Data: 0301926-2 30 June 2003 (30.06.2003) SE
- (71) Applicant (for all designated States except US): DOMETIC SWEDEN AB [SE/SE]; Torggatan 8, S-171 54 Solna (SE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): KORSSELL, Thomas [SE/SE]; Åvalundsvägen 14, S-187 31 Täby (SE).
- (74) Agents: HASSELGREN, Joakim et al.; Kransell & Wennborg AB, Box 27834, S-SE-115 93 Stockholm (SE).
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:  
— with international search report

[Continued on next page]

(54) Title: INVERTER



(57) Abstract: The present invention relates to an inverter and a method for converting direct current voltage to alternating current voltage. The inverter comprises a first input arranged to be connected to the ordinary current supply system of a vessel, where the current supply system comprises a generator connected to a battery, and an output arranged to be connected to an alternating current motor, where, for at least a period of time, the alternating current motor requires a first torque  $M_1$  in order to rotate. The inverter comprises, in addition, a regulating circuit arranged to measure a charging current from the generator to the battery and to measure the voltage level in the battery. The regulating circuit is, in addition, arranged to permit a certain output current from the vessel's ordinary current supply system to the inverter which is higher than the charging current, in a first operating mode. The regulating circuit is, in addition, arranged to limit the output current while maintaining the torque for the alternating current motor, in a second operating mode.



(88) Date of publication of the revised international search report:

23 June 2005

(15) Information about Correction:

see PCT Gazette No. 25/2005 of 23 June 2005, Section II

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*